Culture and Medicine

Tuberculosis in Seattle, 1949-1973: balancing public health and civil liberties

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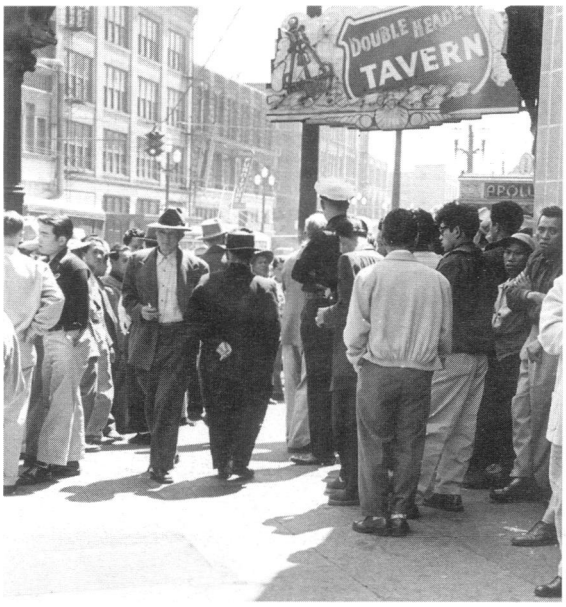
Until the late 19th century, most physicians believed that pulmonary tuberculosis, then known as consumption, was not communicable. In 1882, however, the German scientist Robert Koch demonstrated otherwise. Tuberculosis, Koch proved, was caused by a bacterium, subsequently named *Mycobacterium tuberculosis*, which was transmitted to uninfected individuals via the pulmonary secretions of those sick with the disease.[1] Building on this knowledge, physicians and lay people throughout the United States inaugurated a tuberculosis control movement designed to prevent the spread of the disease.

Almost immediately, however, health officials realized that tuberculosis patients did not always follow sanitary regulations. In particular, many refused to remain in isolation hospitals, even if they were infectious. Such individuals were generally poor and often had multiple social problems. This paper will examine one such group—Skid Road alcoholics in Seattle, Washington—in the decades after World War II. (The place named "Skid Road" gave rise to the more common term "skid row.") Confronted with the perennial challenge of balancing the protection of public health with the rights of tuberculosis patients, Seattle officials established a locked ward at the local Firland Sanatorium in 1949. The history of detention at Firland demonstrates the challenges of trying to improve adherence among disadvantaged populations.

After a brief increase in the early 1990s, rates of tuberculosis in the United States are once again declining, but the disease remains epidemic in the developing world, where it causes millions of deaths each year. As officials confront the global threat of tuberculosis, it is instructive to review the history of Firland's locked ward. As in the past, the treatment of tuberculosis remains intertwined with the social problems that predispose poor people to the disease.



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Seattle in the time of tuberculosis.

Summary Points

- American health officials have forcibly confined nonadherent tuberculosis patients throughout the 20th century.
- The country's most aggressive detention program after World War II was at Seattle's Firland Sanatorium.
- Although Seattle officials overused detention, they believed it was the only available mechanism for curing alcoholic tuberculosis patients from the city's "Skid Road."
- Modern tuberculosis workers caring for poor tuberculosis populations should not rely on coercion as a strategy for improving nonadherence.

Control programs begin

Building on Koch's work, New York City health officer Hermann Biggs organized America's first tuberculosis control program in 1893. National efforts began in 1904 with the founding of the National Association for the Study and Prevention of Tuberculosis, later the National Tuberculosis Association (NTA). Both Biggs and the NTA conducted campaigns designed to control the spread of tuberculosis, which preferentially affected crowded urban population centers. Educational materials urged citizens to lead healthy lifestyles, to cough into handkerchiefs, and never to spit in public.[2-5] Health officials also insisted that individuals with active tuberculosis remain isolated, either in tuberculosis sanatoriums or at home. As tuberculosis was the leading cause of death in many American cities in the early 20th century, such measures received wide support.

Treatment for tuberculosis during this era was largely supportive, consisting of fresh air and bed rest. Cures, when they occurred at all, frequently took months or years. As a result, against advice, patients often left hospitals prior to completing treatment. These individuals, mostly men, generally came from poor areas such as New York's Bowery district or Seattle's Skid Road. Their rates of alcoholism, homelessness, and unemployment were high.

One person who had little tolerance for unapproved discharges was Hermann Biggs. In 1903, he converted a portion of New York's Riverside Hospital into a detention facility. Biggs's decision to detain nonadherent consumptive patients was fully supported by state quarantine laws that permitted the detention of infectious patients believed

to be hazards. Yet the actual use of detention at Riverside did not only reflect public health concerns. "Homeless, friendless, dependent, dissipated and vicious consumptives," Biggs wrote in justifying his detention policies, "are likely to be most dangerous to the community."[6] This kind of language, commonplace among Biggs's contemporaries,[7] demonstrates how the actual danger these men represented became conflated with the public's largely negative assessment of their lives. As a result, the attempt to implement strict but fair public health policies in New York was subsumed by the perceived need to control an unruly population of alcoholics and vagrants.[8]

Despite Biggs's early efforts, American health departments actually used forcible detention quite sparingly during the first half of the 20th century. Detention was expensive and difficult to enforce, and it had no endpoint.[9] Tuberculosis officials in this era paid more attention to controlling populations than policing specific individuals. This situation would change dramatically after World War II with the introduction of the first curative antibiotics for tuberculosis. Streptomycin was introduced in 1947, followed by para-aminosalicylic acid in 1949 and isoniazid in 1952.[10] For the first time, detention of nonadherent persons, if needed, would only be required for a finite period.[11]

Nevertheless, health officials did not anticipate that they would have to rely extensively on forcible detention. They initially believed that tuberculosis patients would willingly take the new medications as prescribed. Yet antibiotics proved to be no panacea. Many patients still left sanatoriums against advice and did not regularly take their pills after discharge. At times, such nonadherence led to the development of drug-resistant strains of tuberculosis. Confronted anew with Biggs's dilemma of balancing public health and civil liberties, health departments once again turned to detention as a way to make patients comply.

Between 1945 and 1970, more than 30 states forcibly detained tuberculosis patients. These efforts varied widely. Most health departments confined patients in locked hospital wards, but some used prisons.[11] Certain states required extensive legal proceedings prior to detention, while others gave public health officials broad discretionary power. If there was a prototypical detention program anywhere in the country, however, it was at Firland.

Sequestered in Seattle

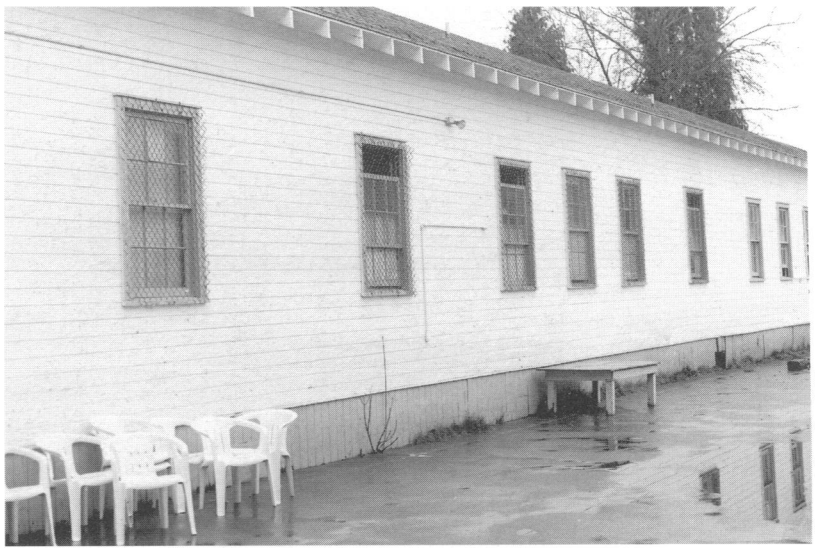
How did Seattle implement its isolation policies? First, Washington state tuberculosis control officer Cedric Northrop made sure that regulations carefully spelled out the exact powers of public health officers. In 1948, Northrop drafted an ordinance enabling the Seattle health officers to quarantine to Firland anyone with active tuberculosis who was "uncooperative" and "refused to observe the [necessary] precautions to prevent the spread of the disease."[12] Those quarantined were to remain until discharge was approved.

When early efforts at quarantine did not prevent discharges against advice, Firland, in June 1949, established a 27-bed locked ward. Known as Ward 6, the unit was equipped with both locked doors and heavily screened windows (Figure 1). All admitted patients spent the first 24 hours in a locked cell, which contained only concrete slabs covered by thin mattresses (Figure 2).[13-15] Firland staff planned to use Ward 6 sparingly. "If coercion is needed frequently," medical director Roberts Davies wrote, "it is a sure sign that something is wrong."[16] In fact, the early use of Ward 6 was limited. Northrop observed in December 1949 that it housed "only a handful" of patients. There were no beds for women.[17]

Over time, however, this situation changed. Initially, Northrop had planned to use forcible isolation for the occasional nonadherent person in the community who represented a public health threat. It soon became clear that the major problem in tuberculosis control was occurring at the sanatorium itself among a specific population of patients: so-called Skid Road alcoholics. These men, transients who traveled the West Coast looking for jobs, lived in an area south of downtown Seattle known as the Skid Road.[18] Their tuberculosis rates were the city's highest.

What problems did these men create at Firland? First, many of them went AWOL from the sanatorium for variable periods of time, often returning drunk. In addition, although possession of alcohol at Firland was illegal, bootlegger patients frequently smuggled in large quantities of liquor. Loud, raucous drinking parties often ensued in Firland's unlocked areas.[13]

While the behavior of Skid Road alcoholic patients caused much frustration, Firland did not simply respond in a punitive manner. Its staff was committed to the care of alcoholics and treated them with more tolerance and respect than they received in jail or in public hospitals. In addition, by the



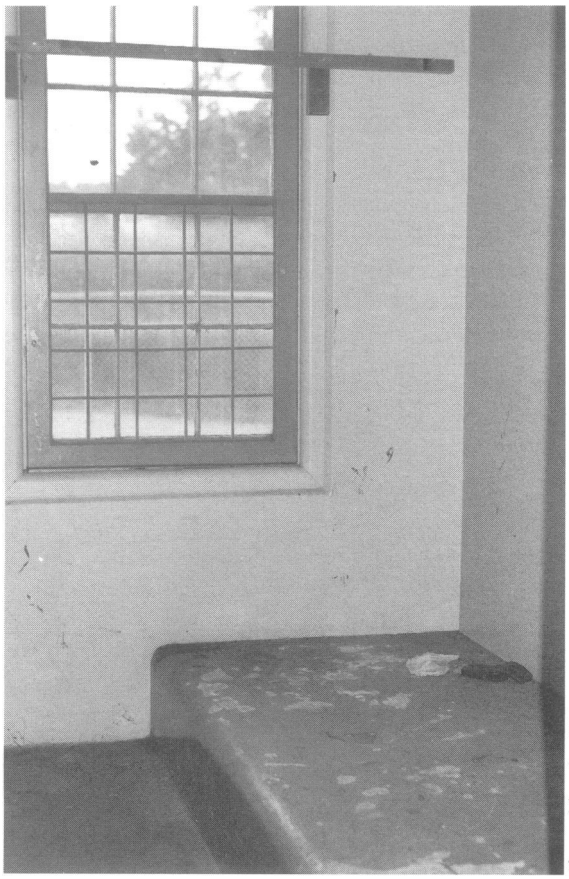
Photograph by author, 1993.

Figure 1 *Heavily screened windows on the outside of Firland Sanatorium's locked ward.*

early 1950s, alcoholism was being reclassified as a disease as opposed to a sin. In response, the sanatorium developed an extensive program of social and rehabilitative services, including programs that addressed issues of unemployment and alcoholism among Skid Road patients.[19]

Nevertheless, staff members grew increasingly concerned about the disorder that the Skid Road population caused at the sanatorium. As a result, they began to detain Skid Road alcoholics who went AWOL, overstayed a 24-hour pass, or got drunk at Firland. While Northrop's initial order of quarantine had stated that only patients with *active* tuberculosis could be forcibly isolated, this did not occur in practice. Firland staff also sent patients with *inactive* tuberculosis to Ward 6 for having gone AWOL or gotten drunk. These patients included those who had been noninfectious for 3 to 6 months and had always been totally compliant with their antibiotics. Basically, therefore, the disruption of institutional order at Firland came to be seen as a public health violation, punishable by detention.[11]

Decisions about which patients would be detained were made almost entirely at the sanatorium, without formal legal proceedings. The medical director decided which transgressions warranted punishment and how long detention would last. Generally, length of stay on Ward 6 followed a standard formula: the first stay was 2 weeks; the second, 1 month; and the third, 3 months.[13,14] Patients who repeatedly broke rules and required prolonged hospitalization often stayed on the locked ward for a period of time totaling several years. Few, if any, middle-class patients who broke rules at Firland were confined.



Photograph by author, 1993.

Figure 2 *One of the locked cells used for acutely inebriated tuberculosis patients at Firland Sanatorium. A thin mattress was placed on the concrete slab.*

Patients' objections

Most detained patients raised no objections. In a series of letters sent to government officials and the media in 1956 and 1957, however, several Firland patients registered complaints. One patient, for example, questioned why the health officer could quarantine noninfectious persons. "The patients themselves," the author wrote, "would be the first to condemn another who left here illegally if he were contagious; however, contagiousness has nothing to do with the quarantines."[20] Another patient asked why someone returning from a 24-hour pass after having "one or two drinks" was "treated as an alcoholic" and had a "very good chance of being thrown in jail."[21]

This same patient criticized the lack of formal legal input. The doctors, he wrote, "may sentence a patient from one day to six months, as they see fit. We want to know by what right, and on what authority this is being done."[21] "Free-born people," 2 patients proclaimed in 1957, "are not accustomed to dictatorship that forces indignaties [sic] on them while they are helpless."[22]

These complaints were generally greeted with skepticism. Health officials were particularly critical, terming the missives "typical 'crank' letters which we have been accustomed to seeing produced by the paranoid type of personality."[23] Eventually the patients' complaints reached the Washington chapter of the American Civil Liberties Union (ACLU). ACLU representatives who investigated conditions at the sanatorium in 1957 documented the following civil liberties "abuses" at Firland: "misuse of quarantine..., the assignment of patients to maximum security wards, and the use of solitary confinement."[24] Yet even the ACLU let the issue drop.

Once Firland turned to quarantine and detention to maintain order, the use of those measures increased markedly. Whereas 10% of patients had been quarantined in 1952, the figure reached 30% by 1960.[12] In 1954, Ward 6 expanded from 27 to 54 beds, including 6 beds for women.[15] By 1960, almost half of hospitalized Skid Road alcoholics were detained for at least 2 weeks.[25] Detention, initially intended for the occasional and extremely nonadherent individual, had become nearly standard management of Skid Road alcoholic patients.

Meanwhile, Firland's locked ward became a model for similar units across the country. Staff physicians wrote numerous articles on the management of so-called "recalcitrant" tuberculosis patients. Large numbers of people,

wrote medical director Thomas Sheehy, Jr., in 1957, "come to Firland from all points around the country to observe Ward Six in action."[26] For the most part, national commentators condoned detention. For persistently obstinate patients, wrote the Journal of the American Medical Association in 1958, it was necessary to "resort to available legal measures."[27] One physician who objected to forcible confinement was Denver's Sidney Dressler, who termed detention a "misapplication of police authority" that led health officials to treat patients like criminals.[28]

By the mid-1960s, growing legal challenges to the civil commitment of the mentally ill had begun to have repercussions at Firland. In 1964, the ACLU returned to the sanatorium to establish a unique program in which a Seattle district court judge traveled to Firland to hear the grievances of detained patients.[19] Staff members became more tolerant of misbehavior at the institution. Indeed, at times, Ward 6 was a subject of humor, as in this poem from Firland's patient magazine:

> No matter what I do "for kicks,"
> I'm always ending up in "6,"
> As anyone can plainly see,
> This must be where I like to be.
> The keys and locks could go—it's true,
> And heavy screens don't help our view.
> But if in "6" I have to stay,
> My friends are with me—anyway.[29]

Similarly, an advice column in the magazine, entitled "San Landers," offered droll counsel to detainees. Despite the more flexible environment, Firland continued to confine nonadherent individuals until it closed in 1973. Between 1949 and 1973, the sanatorium detained close to 2000 patients.

As with Hermann Biggs's policies in New York, it is easy in retrospect to criticize Firland's excessive use of detention. What should be emphasized, however, is the manner in which public health work once again became conflated with the need to control a "difficult" patient population. Seattle officials were careful to update and clarify their quarantine regulations before initiating detention. They planned to use detention only as a last resort. They took rehabilitation of the alcoholic patient quite seriously. Nevertheless, in practice, public health powers were inappropriately stretched.

Conclusion

Lacking conclusive studies, it is difficult to ascertain the degree to which coercion of tuberculosis patients contributed to the declining rates of the disease from the 1950s to the mid-1980s. Yet when tuberculosis underwent a resurgence in the United States beginning in 1985,[30] including highly lethal multidrug-resistant (MDR) strains, health officials again recommended the use of forcible detention to help control the disease. Given that the return of tuberculosis was linked to issues such as nonadherence, homelessness, and HIV infection,[31,32] such a response is not surprising. Health departments established detention programs in New York City, Denver, Massachusetts, and California, among other locations.[33-36]

Fortunately, modern tuberculosis officials have been careful to use such powers sparingly, confining from 1.3% to 5% percent of their patients. Building on court decisions from the 1960s and 1970s, those detained have had access to legal representation and other due process protections.[37,38] In general, health departments have detained persons only when they have failed other "least restrictive alternatives." Foremost among these is directly observed therapy (DOT), in which outpatients take antibiotics in the presence of an outreach worker.

Yet the history of Firland should remind us of the ramifications of the use of forcible confinement. Although modern health officials have strived to use detention only for persistently nonadherent individuals, such persons almost invariably come from the poorest populations. Indeed, due to complicated sociomedical problems, such as psychiatric disorders and substance use, adherence may be an impossibility for such individuals. Society should not use coercion as a substitute for addressing the underlying causes of nonadherence.[39] Detention should also be a last resort for controlling tuberculosis among immigrants from the developing world, who have high rates of MDR disease.[40]

Indeed, it is in the developing world that the problem of tuberculosis remains especially acute. As the incidence of the disease has once again declined in Western nations, the vast majority of the roughly 3 million annual deaths from tuberculosis occur in poor countries in Africa, Asia, and Southeast Asia. Frequent coinfection with HIV makes tuberculosis extremely hard to control in these areas. Hoping to repeat the recent successes of DOT in the United States, health officials in these countries, working with the World Health Organization and other agencies, are aggressively promoting the widespread dissemination of so-called directly observed therapy short course (DOTs).[41] DOTs aims to control tuberculosis in low-income, high-prevalence areas with an intensive 6-month course of supervised antibiotic therapy. In this sense, public health efforts in the 21st century will harken back to the early attempts of Hermann Biggs to implement population-based strategies for preventing and treating tuberculosis among the highly susceptible urban poor.

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COMMENTARY
Considerations on the road to involuntary confinement

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Mr. Martinez came from the Philippines to San Francisco. He came with other 70-year-old veterans, naturalized citizens who had been promised a monthly social security check for supporting the Allies in World War II. He left behind his family and most of his material goods, but he brought along his drug-resistant tuberculosis. From late at night until dawn, he worked with other Filipinos, cleaning and completing odd jobs around the casinos in Reno, Nevada. By the time his illness was diagnosed, a few years after he arrived in the United States, he could no longer support himself or send money home.

Because his tuberculosis was drug-resistant, he was placed on directly observed therapy (DOT). He came into the clinic or met with someone at his home or in the neighborhood who would watch him take his pills. He said he was not an educated man and had trouble remembering his weekend dose of medications. While he did not mind the directly observed therapy, he needed his extra income and would leave for Reno once or twice a week.

The clinic staff was sympathetic but resolved to hold Mr. Martinez to the rigors of directly observed therapy. They had sent their Filipino health worker to educate him; they had offered him sandwiches, bus tokens, and kind words. Treating him through the tuberculosis clinic in Reno was not an option since he worked irregularly and at different places. He was a public health threat. What was left except to confine him involuntarily in the hospital or the jail?

Tuberculosis is the classic disease for observing the interplay between individual rights and public health protection. Directly observed therapy, implemented by skilled health workers and enhanced with incentives and enablers, is the primary tool for successful treatment of tuberculosis,[1] but it does not always work. Lerner has examined the evolution of confinement in Seattle, Washington, as a means of controlling tuberculosis.[2] Now, as then, while involuntary confinement appears the ultimate tool for successful treatment of tuberculosis, closer examination suggests that less coercive measures may be more suitable.

In the United States, public health emphasis has seesawed between chemotherapy and behavioral therapy. When new drugs for treating tuberculosis became available in the 1950s, behavioral interventions were shunted aside, only to reemerge as a critical tool with the new round of epidemics in the late 1980s. The rise in the number of people with the disease and the development of multidrug resistance, due primarily to poor therapy adherence, motivated changes in tuberculosis programs. Behavioral interventions, in the form of directly observed therapy, have been the treatment of choice since adherence seized the